HOW THEY FIGHT

DESERT SHIELD

ORDER OF BATTLE
HANDBOOK

FRIENDLY FORCES

NOVEMBER 1990

AIA-DS-3-90

Purpose of this Handbook

This handbook was produced by the United States Army Intelligence and Threat Analysis Center (USAITAC) under the auspices of the United States Army Intelligence Agency (USAIA). It has been designed as a companion volume in a series that began with *Identifying the Iraqi Threat and How They Fight*, USAIA, August 1990, *How They Fight*, USAIA, August 1990, and *How They Fight Desert Shield Order of Battle Handbook*, USAITAC, September 1990.

The first two volumes in this series provided detailed information on Iraqi military organizational structure and insignia, military doctrine and tactics, equipment recognition, and limited medical information keyed to the Desert Shield area of operations (AO).

This, the third volume in the series, provides equipment, uniform, officer rank insignia recognition, and military aircraft marking for friendly forces committed to the Desert Shield AO. No attempt to reduce redundancies in equipment recognition guides when commonalities exist between friendly and enemy force inventories has been undertaken. Each volume in the series, though complimentary, has been produced as a stand-alone document pertaining to its subject matter.

The USAITAC wishes to thank the Defense Intelligence Agency, the National Photographic Interpretation Center, the Federal Research Division of the Library of Congress, and the US Army Library in the Pentagon for their responsive support and assistance in the research and production of this handbook.

The USAITAC extends its gratitude to Jane's Information Group for granting release of the materiel characteristics, specifications, and illustrations used in this handbook. The preponderance of data used was taken from the following volumes: *All the World's Aircraft* (1986-1987 and 1989-1990); *Armour and Artillery* (1986-1987 and 1989-1990); *Armoured Fighting Vehicle Systems* (1989-1990); *Land-Based Air Defense* (1989-1990); *Infantry Weapons* (1988-1989); *Weapon Systems* (1988-1989); *Light Tanks and Armoured Cars* (1984); and *AFV Recognition Handbook* (1987). USAITAC also appreciates contributions from the *NATO Land Forces Recognition Guide* (1987), *Modern Combat Uniforms* (1988), *Armies of the Middle East Wars* (1988), and *The Pocket Guide to Military Aircraft* (1986).

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Each section is marked with a black bar indicator.

Officer Rank Insignia Recognition

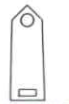
MIDDLE EAST & NORTH AFRICA

Officers Military Rank Insignia Recognition

(Ground Forces)

UNITED STATES	2D LIEUTENANT	1ST LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL
BAHRAIN	MULAZIM THANI	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
BANGLADESH	2D LIEUTENANT	LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL
EGYPT	MULAZIM	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
FRANCE	SOUS-LIEUTENANT	LIEUTENANT	CAPITAINE	COMMANDANT	LT COLONEL

COLONEL	BRIGADIER GEN	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	GENERAL OF THE ARMY
'AQID	'AMID	LIWA'	FARIQ	MUSHIR	
COLONEL	BRIGADIER	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	
'AQID	'AMID	LIWA'	FARIQ	FARIQ AWWAL	MUSHIR
COLONEL	GENERAL DE BRIGADE	GENERAL DE DIVISION	GENERAL DE CORPS D'ARMEE	GENERAL D'ARMEE	MARECHAL DE FRANCE

UNITED STATES	 2D LIEUTENANT	IST LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL
KUWAIT	MULAZIM	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
MOROCCO	SOUS-LIEUTENANT	LIEUTENANT	CAPITAINE	COMMANDANT	LIEUTENANT COLONEL
OMAN	MULAZIM THANI	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
PAKISTAN	2D LIEUTENANT	LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL

COLONEL	BRIGADIER GEN	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	GENERAL OF THE ARMY
'AQID	'AMID	LIWA'	FARIQ		N/A
COLONEL MAJOR	GENERAL DE BRIGADE	GENERAL DE DIVISION	GENERAL DE CORPS D'ARMEE	GENERAL D'ARMEE	MARECHAL
'AQID	'AMID	LIWA'	FARIQ	FARIQ AWWAL	MUSHIR
COLONEL	BRIGADIER	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	FIELD MARSHAL

UNITED STATES	2D LIEUTENANT	IST LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL
QATAR	N/A	N/A	N/A	N/A	N/A
SAUDI ARABIA	MULAZIM THANI	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
SENEGAL	SOUS-LIEUTENANT	LIEUTENANT	CAPITAINE	COMMANDANT	LT COLONEL
SYRIA	MULAZIM	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM

COLONEL	BRIGADIER GEN	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	GENERAL OF THE ARMY
N/A	N/A	N/A	N/A	N/A	N/A
'AOID	'AMID	LIWA'	FARIQ	FARIQ AWWAL	MUSHIR
COLONEL	GEN DE BRIGADE	GEN DE DIVISION	LIEUTENANT GEN	GENERAL	
'AOID	'AMID	LIWA'	'MAID	FARIQ AWWAL	

UNITED STATES	2D LIEUTENANT	IST LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL
UNITED ARAB EMIRATES	MULAZIM THANI	MULAZIM AWWAL	NAQIB	RA'ID	MUQADDAM
UNITED KINGDOM	2D LIEUTENANT	LIEUTENANT	CAPTAIN	MAJOR	LT COLONEL

COLONEL	BRIGADIER GEN	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	GENERAL OF THE ARMY
'AQID	'AMID	LIWA'			
COLONEL	BRIGADIER	MAJOR GENERAL	LIEUTENANT GEN	GENERAL	FIELD MARSHAL

N/A

Notes

Uniforms

Uniforms

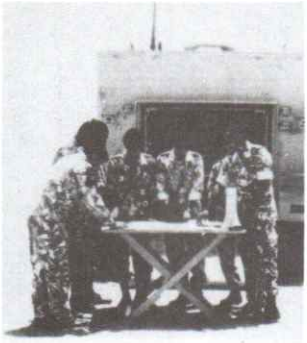
Bahrain

Bangladesh

Egypt

France

Kuwait



Morocco

Oman

Pakistan

Qatar

Saudi Arabia

Senegal

Syria

United Arab Emirates

United Kingdom

Notes

EQUIPMENT RECOGNITION

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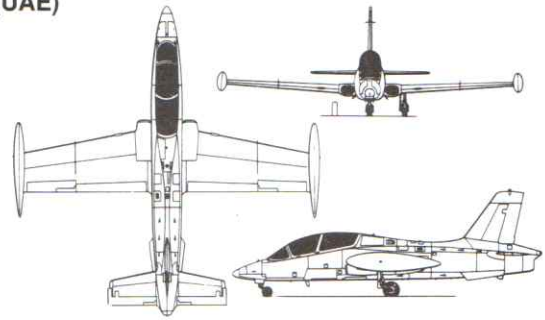
Equipment Recognition
Aircraft

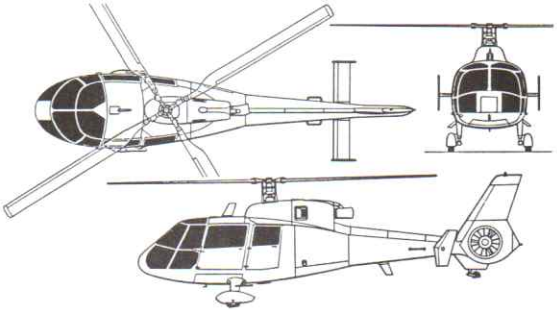
Aermacchi M.B. 339K
(UAE)



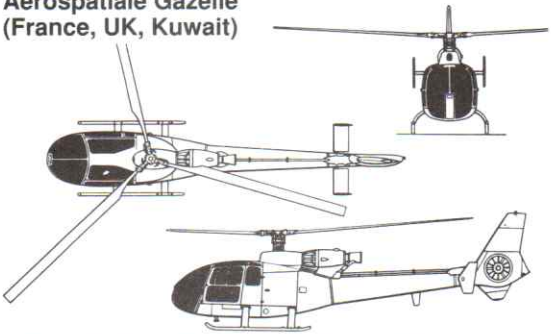
Aérospatiale AS 332L Super Puma
(France, Kuwait)

Note: France and Kuwait have the Puma, predecessor to the Super Puma. The Puma does not carry the Exocet antiship missile. Iraq has Super Puma.

Aérospatiale AS-365N Dauphin
(France, Saudi Arabia)

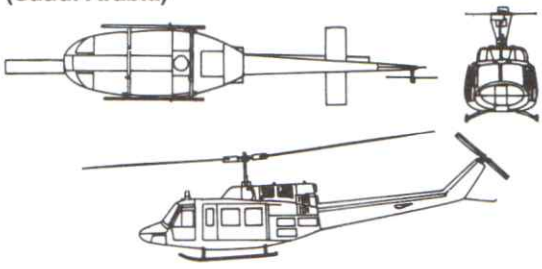


Aérospatiale Gazelle
(France, UK, Kuwait)



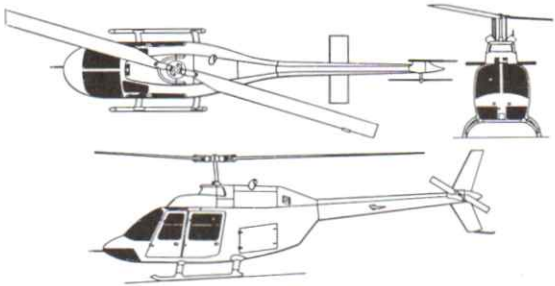
Note: HOT ATGM can be mounted to the Gazelle.
Iraq has the Gazelle.

Agusta-Bell Model 212ASW
(Saudi Arabia)

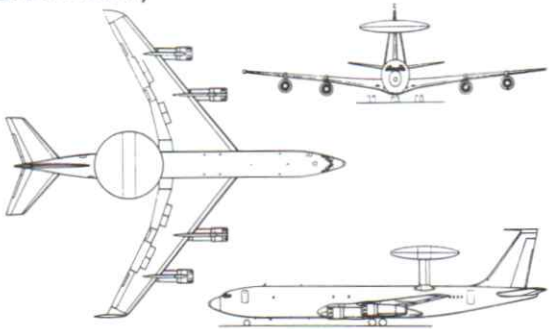


Bell Model 205 (UH-1 Iroquois)
(Saudi Arabia)

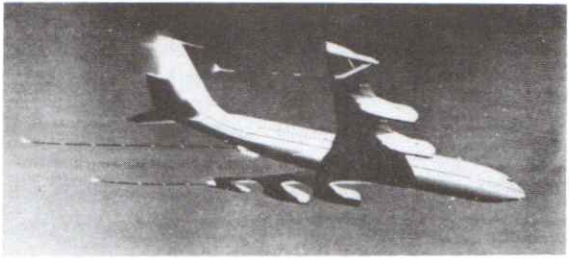
Bell Model 206B (Jet Ranger III)
(Saudi Arabia)



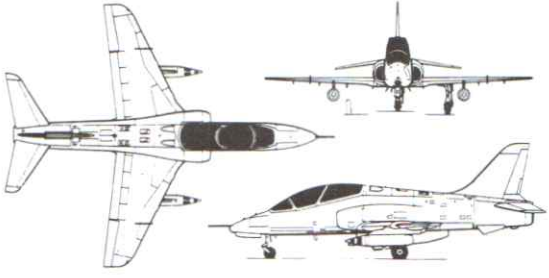
Boeing E-3A
(Saudi Arabia)



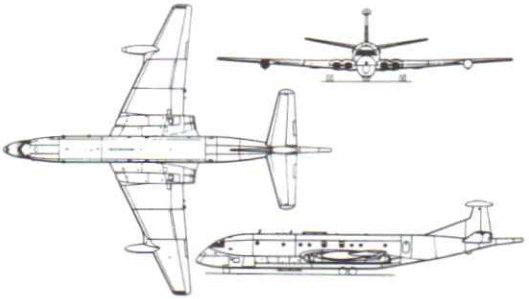
Boeing KE-3A
(Saudi Arabia)



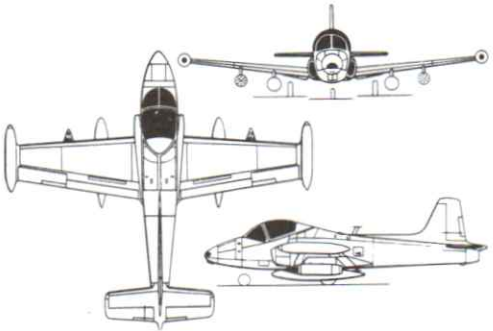
British Aerospace Hawk
(Saudi Arabia, UAE)



British Aerospace Nimrod MR.2
(UK)

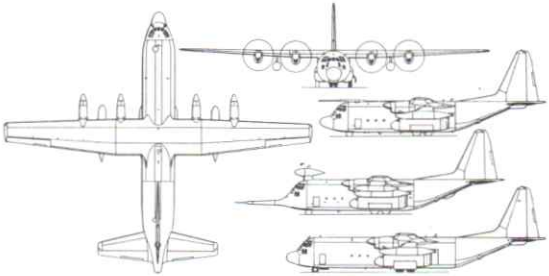


British Aerospace Strikemaster MK 80
(Kuwait, Oman, Saudi Arabia)



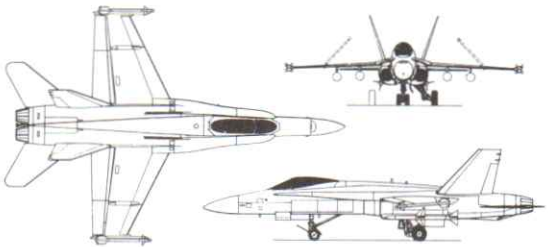
Note: Iraq has some captured Strikemasters.

C-130E/H Hercules (Argentina, Greece, Italy, UAE, Saudi Arabia, Kuwait, Oman)

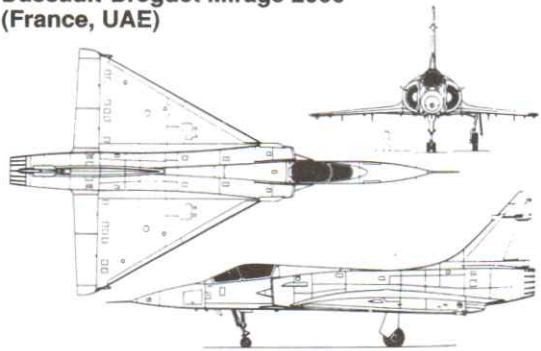


Note: Saudi Arabia has the KC-130 variation (refueling tanker).

CF-18A/B Hornet (Canada)

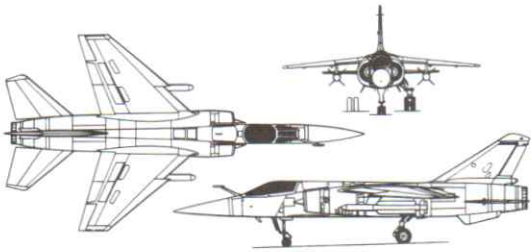


Dassault-Breguet Mirage 2000 (France, UAE)



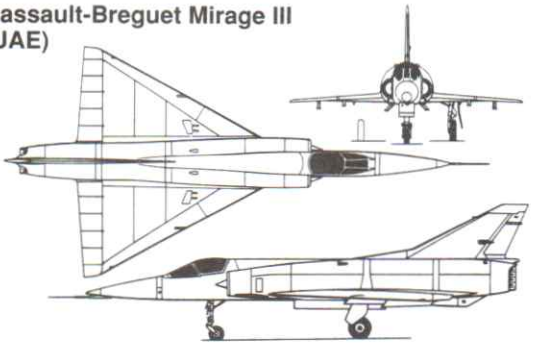
Note: UAE also has the Mirage V.

Dassault-Breguet Mirage F-1 (Kuwait, Qatar)



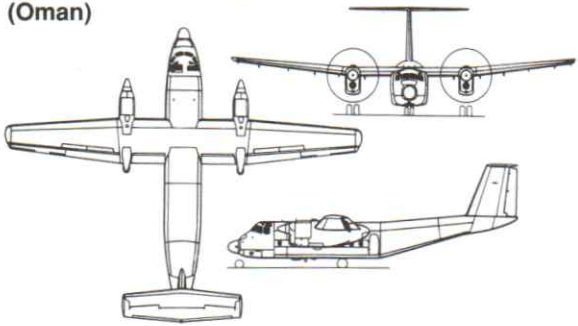
Note: Iraq has some captured F1s.

Dassault-Breguet Mirage III (UAE)

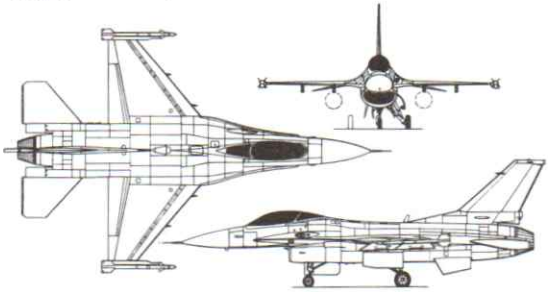


Dassault-Breguet/ Dornier Alpha Jet (Qatar)

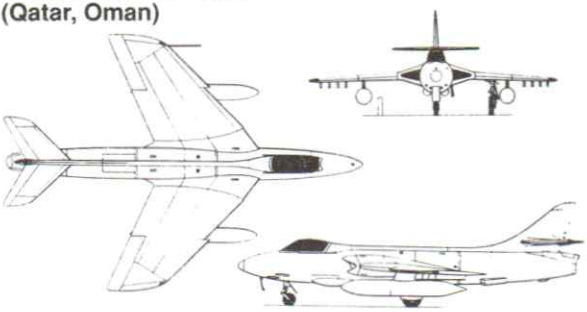
de Havilland DHC-5 Buffalo (Oman)



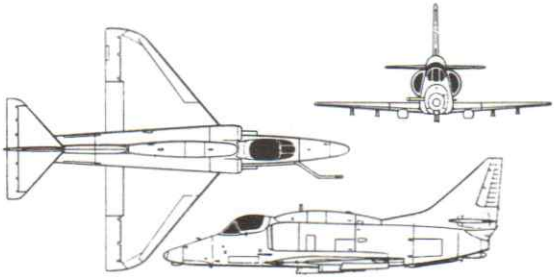
F-16 Fighting Falcon (Belguim, Netherlands, Egypt, Bahrain)



Hawker Hunter FGA.9
(Qatar, Oman)

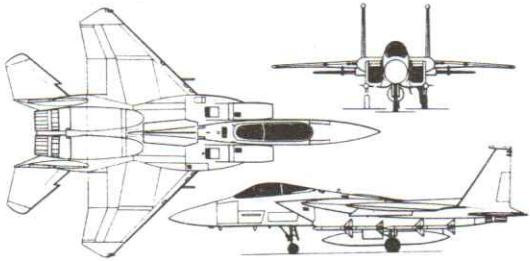


McDonnell Douglas A-4M Skyhawk
(Kuwait)



Note: Iraq may have some captured Skyhawks.

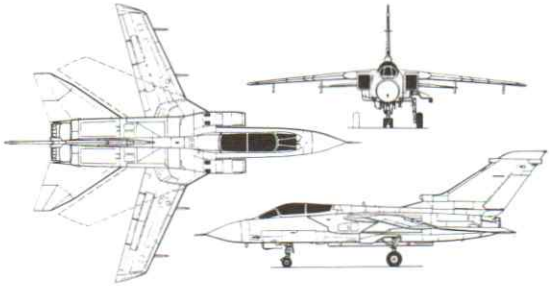
McDonnell Douglas F-15C
(Saudi Arabia)



Northrop F-5B/E
(Bahrain, Saudi Arabia)

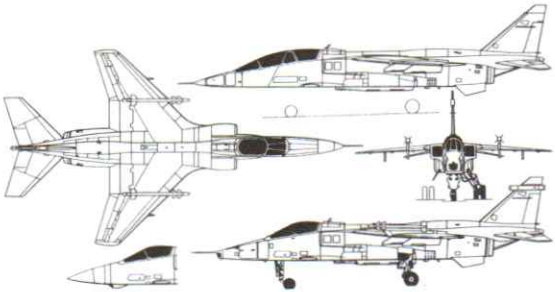
Note: Saudi Arabia also has the RF-5E version (reconnaissance).

Panavia Tornado ADV/IDS
(Italy, Saudi Arabia, UK)

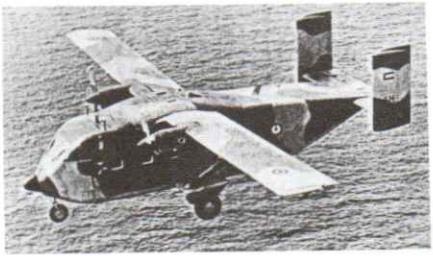


Sea King
(Egypt, Saudi Arabia)

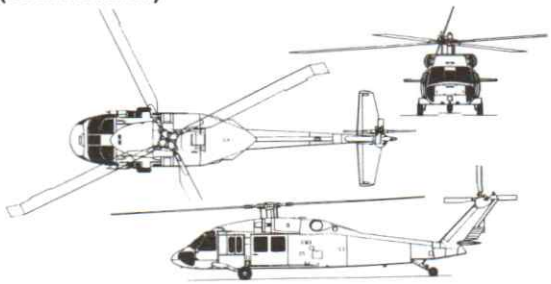
SEPECAT Jaguar
(UK, Oman, France)



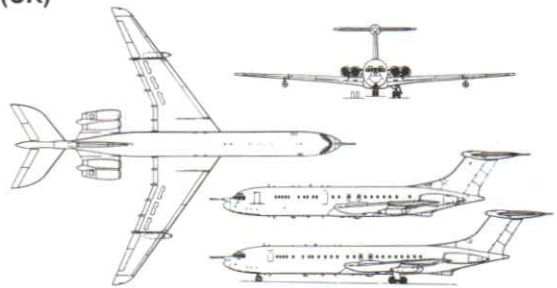
Shorts Skyvan
(Oman)



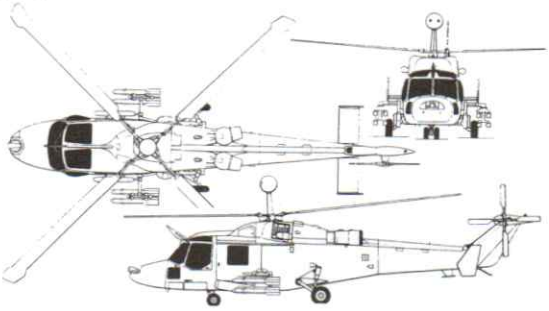
Sikorsky UH-60A Blackhawk (Desert Hawk) (Saudi Arabia)



VC10 K. Mk 3 Flight Refueling Tanker (UK)



Westland Lynx-3 with TOW
(UK)

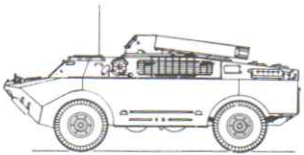


Notes

Notes

Equipment Recognition
Air Defense

SA-9 (Gaskin) (Egypt, Syria)



CHARACTERISTICS:

Type	Mobile short-range tactical air defense missile
Guidance	IR homing
Propulsion	Solid
Warhead	HE, 2.6 kg
Launch weight	30 + kg
RANGE	8 km (approx)
Speed	Mach 1.5+
Ceiling	4000-6000 m

Note: Iraq has SA-9s.

Shahine I and II Air Defense System (Saudi Arabia)

CHARACTERISTICS:

Acquisition range	19.5 km against 1 m^2 fluctuating target
Tracking range	17 km
Service range	0.5-11 km against 250 m/s target
Vehicles	Cross-country tracked typed or heavy duty wheeled vehicles
Reaction time	6 s
Missile acquisition distance	500 m
Warhead	14 kg
Kill probability	0.9 (head-on target) 0.99 (two-round salvo)

Crotale Surface-to-Air Missile System (Egypt, Saudi Arabia)

CHARACTERISTICS:

Guidance	Radio command
Early Warning/ Acquisition Radar	THD-5000 (vehicle-mounted)
Tracking and Guidance Radar	Mounted on launch vehicle (optical backup)
Propulsion	Single-stage, solid propellant
Weight of Missile, Including Warhead	176 lbs
Minimum/Maximum Effective Range	0.5/8.5 km
Minimum/Maximum Effective Altitude	50 m/ 6 km
Reaction Time	6 seconds from target detection to first missile fired
Rate of Fire	2 missiles in salvo with 3-second separation
Reload Time	2 minutes for four missiles from unit resupply vehicle
Type and Weight of Warhead	HE-COFRAM/33 lbs

Javelin (Oman, UK)

CHARACTERISTICS:

Length	1.4 m
Max Range	4 to 5 km
Max Altitude	2 km
Max Speed	Mach 1.7+
Fuse	Proximity
Guidance	SACLOS
Mount	Man Portable

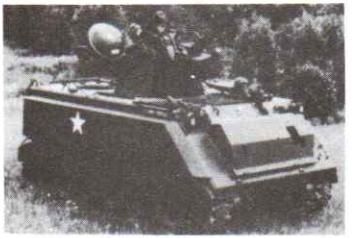
Mistral (France)

CHARACTERISTICS:

	Launch Vehicle
Crew	2
Combat Weight	14,800 kg
Length	6.22 m
Width	2.65 m
Height (reduced for air transport)	2.04 m
Ground Clearance traveling	0.45 m
action	0.156 m-0.656 m
Max Road Speed	70 km/h
Max Range	500 km
Fording	0.68 m
Gradient	40% at 2 km/h
	10% at 25 km/h
Vertical Obstacle	0.3 m

Missile	
Guidance Principle	Passive IR homing
Missile Body Diameter	90mm
Missile Weight	17 kg
Max Speed	Mach 2.6
Max Range	6,000 m

M163A1 Vulcan (Saudi Arabia)

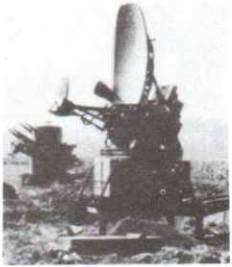


CHARACTERISTICS:

This is essentially an M113A1 chassis fitted with a one-man electrically driven turret that is armed with a 20mm M168 Vulcan gun, Navy Mk 20 Mod. A gyro lead-computing sight and a range-only radar are mounted on the right side of the turret. The chassis is designated the M741.

Note: Saudi Arabia also has towed Vulcans and Vulcans mounted on the V-150 APC. In addition, they have twin 30mm ADA guns mounted on the AMX-30 (DCA model). Egypt and Syria have the SA-7 (Grail).

Rapier (Towed)
(Oman, Qatar, UAE)



CHARACTERISTICS:

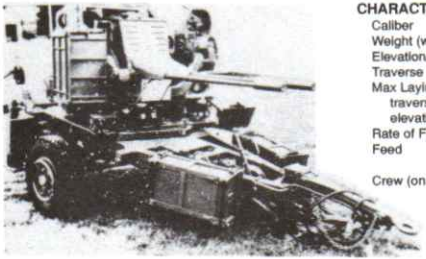
TYPE	Surface-to-air guided weapon system. Land-mobile, air transportable
Guidance	Command to line-of-sight
Length	2.24 m
Weight	42.6 kg
Range	0.5-6.5 km
Time to max range	15.2 seconds
Speed	Mach 2
Control	Cruciform rear fins
Altitude limits	0-3000 m
Warhead	0.55 kg semi-armour piercing with impact fuze

RBS-70
(Bahrain)

CHARACTERISTICS:

Guidance	Laser beam rider
Acquisition and Tracking	Optical; may use target data from PS-70/R radar
Propulsion	Two-stage, solid propellant
Weight of Launch Stand and Sight	59 kg
Weight of Missile and Launch Tube	25 kg
Weight of Missile After Launch	13.1 kg
Minimum/Maximum Effective Range	0.3/5 km
Minimum/Maximum Effective Altitude	0/3 km
Reaction Time	5 seconds from acquisition to launch
Reload Time	10 seconds to change launch tubes
Type and Weight of Warhead	Frag/1 kg

53T1/53T2 (France)



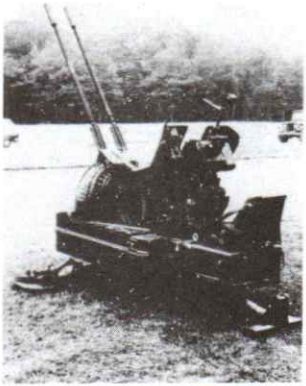
CHARACTERISTICS:

Caliber	20mm
Weight (with ammunition and gunner)	2,500 kg
Elevation/Depression	+80°/-8°
Traverse	360°
Max Laying Speed (hydraulic)	
traverse	80°/s
elevation	50°/s
Rate of Fire (per barrel, cyclic)	900 rpm
Feed	2 x 150 round belts in boxes 50 AP rounds on carriage
Crew (on gun)	1

76T2/76T1 AA Gun (France)

CHARACTERISTICS:

Caliber	20mm
Operation	delayed blowback with locked breech
Carriage	2-wheeled with outriggers
Shield	yes
Weight	
in firing position w/ ammunition	1,513 kg
Length	
traveling	5.05 m
Height	
traveling	2.075 m
Elevation/Depression	
powered	+85.1°/-3.5°
manual	+83°/-5°
Traverse	360°
Rate of Fire (cyclic)	900 rpm, per barrel
Feed	dual selectable belt feed with disintegrating links, 270 rounds per barrel
Effective AA Range	2,000 m
Crew	3 (1 on mount)
Towing Vehicle	4 x 4 truck



Oerlikon 35mm Twin GDF-002 (UAE)

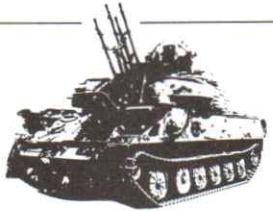
CHARACTERISTICS:

Caliber	35 mm
Weight	
travelling order with ammunition and accessories	6700 kg
Length	
travelling	7.8 m
Ground clearance	0.33 m
Elevation/Depression	+92°/-5°
Traverse	360°
Rate of fire	
per barrel (cyclic)	550 rpm
Feed	112 ready use 126 reserve 238 total on gun
Max effective range (verticle)	4000 m
Crew	3 (local mode)
Towing Vehicle	5-ton (6 x 6) truck

ZSU-23-4 (Syria)

CHARACTERISTICS:

Crew	4
Weight	20.5 t
Length	6.54 m
Agility	
Max step	1.1 m
Max trench	2.8 m
Max gradient	60%
Ground clearance	0.4 m
Water crossing ability	1.07 m
Weapon	4 x 23mm automatic gun
Rate of fire	3400 round/minute (max combined)
Standard ammunition load	2000 rounds
Elevation	-4 to + 85°
Other equipment	NBC system and infrared driving lights are provided
Effective antiaircraft range	2000/2500 m
Effective ground range	2000 m



Note: Egypt has the ZSU-23 twin barreled AA gun. Iraq has ZSU-23-4's.

Notes

Equipment Recognition
Antitank

106mm Recoilless Rifle (Bangladesh)

CHARACTERISTICS:

Length, Overall	3.40 m
Height on Mount	1.13 m
Weight	219 kg
Max Depression	-17°
Max Range	7,640 m

APILAS (France)

CHARACTERISTICS:

Launcher	
Weight loaded	8.5 kg
Projectile	
Caliber of shaped charge	108mm
Weight	4.3 kg
Weight of explosive	1.5 kg
Effective range	330 m
Penetration	720mm
Temperature range	-31° to +51°C

HOT ATGM
(France, Qatar, Saudi Arabia)

CHARACTERISTICS:

Type	Long-range, vehicle mounted, wire-guided, antitank weapon with airborne applications
Guidance Principle	Command to line-of-sight. Optical aiming with automatic IR tracking.
Propulsion	Solid-propellant booster and sustainer
Warhead	6.48 kg hollow charge
Launch Tube Diameter	175mm
Weight	
Missile and container	32 kg
Missile at launch	23 kg
Flight Duration	4,000 m: 17.3 s
Range	75 m- >4 km
Penetration	>800mm of solid armor (HOT 1); >1,300mm (HOT 2). NATO triple-armor target at 65° incidence. Effective against composite armor.
Operating Conditions	-40 to +52°C at up to 95% rh

Note: Qatar and Saudi Arabia have some HOT ATGM's mounted on AMX-10 APC's. Qatar also has HOT mounted in a four launcher configuration on the VAB APC.

MILAN
(France, United Kingdom, Morocco, Oman, Qatar, Syria, UAE)

CHARACTERISTICS:

Missile	
Type	Wire-guided SACLOS system
Weight	(ready to fire) 6.65 kg
Length	769mm
Warhead Diameter	115mm
Warhead Weight	(with fuze) 2.98 kg
Ammunition (Tactical Package)	
Weight in Carrying Condition	11.8 kg
Length	1,260mm
Body Diameter	133mm
Launching/Guidance Unit (Folded)	
Weight	16.4 kg
Traverse	360°
Elevation	up to 20°
Performance	
Velocity	(at launch) 75 m/s; (at 2 km) 200 m/s
Time of Flight to Max Range	13 s
Effective Range	25-2,000 m
Chance of a Hit	(0-250 m) average 75%; (250-2,000 m) greater than 98% (maker's figures)
Warhead Penetration	850mm

Note: Qatar has MILAN mounted on VAB APC's.

Milan on Spartan APC (United Kingdom)

Note: Qatar has the MILAN ATGM VAB APCs.

CHARACTERISTICS:

Crew	3
Range	483 km
Maximum Road Speed	80.5 km/h
Armament	MILAN ATGM 1 x 7.62 mm MG 2 x 4 smoke dischargers

Note: Iraq has MILAN ATGMs.

Striker (UK)

CHARACTERISTICS:

Role	Antitank
Crew	3
Range	483 km
Armament	Swingfire ATGM 1 x 7.62mm MG 2 x 4 smoke dischargers

Swingfire (United Kingdom)

CHARACTERISTICS:

Length, Overall	1,060mm
Max Body Diameter	170mm
Range	
Min	less than 150 m at direct fire
Max	4,000 m
Guidance Principle	Optical sighting. Programmed gathering to line of sight. Wire guidance (MCLOS)
Propulsion	Integral boost and sustainer motor
Warhead Penetration	700mm

LRAC 89 (France)

CHARACTERISTICS:

Caliber	88.9 mm
Length	(during transport) 1.168 m; (in firing position) 1.6 m
Weight	(in transport condition) 5.5 kg including sight; (loaded) 8.2 kg
ANTITANK ROCKET	
Caliber	88.9 mm
Length	600 mm
Weight	(without container) 2.2 kg; (with container) 3.2 kg
Muzzle velocity	300 m/s
Max effective antitank range	600 m
Max range at 45°	2300 m
Penetration	steel plate at normal (0° obliquity) more than 400 m; concrete (0° obliquity) 1300 mm

Law 80
(United Kingdom)

CHARACTERISTICS:

Caliber	94 mm
Penetration	in excess of 650 mm
Length	1 m (folded) 1.5 m (extended)
Weight	
Carry	10 kg
Shoulder	9 kg
Effective range	20 m - 500 m

Bahrain, Pakistan and Saudi Arabia have the TOW ATGM mounted on M-113's. Saudi Arabia also has TOW mounted on VCC1 and V-150 APC's. Egypt, Bahrain, Oman and UAE have ground TOW's. Another version with friendly forces is TOW mounted on the M151 (Jeep). Kuwait has the AT-5 mounted on BMP-2. Kuwait has the M901 ITV (Improved TOW Vehicle).

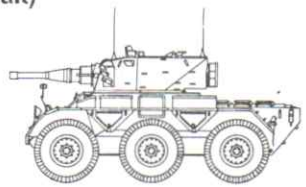
Note: Iraq has ground TOW launchers and launchers on M151/GAZ-69 jeeps. Iraq may also have captured Kuwaiti M901 ITV's.

Notes

Equipment Recognition

APC, IFV, ACV & ARV

Alvis Saladin (ARV)
(United Kingdom, Kuwait)



CHARACTERISTICS:

Crew	3
Combat Weight	11,590 kg
Length Hull	4.93 m
Width	2.54 m
Height	
to top of gunner's periscope	2.93 m
to turret roof	2.19 m
Ground Clearance	0.426 m
Max Road Speed Forwards	72 km/h
Fuel Capacity	241 liters
Max Range	400 km
Fording	1.07 m
with kit	2.13 m
Gradient	46%
Vertical Obstacle	0.46 m
Trench	1.52 m
Turning Radius	7.31 m
Armament	
main	1 x 76mm gun
coaxial	1 x 7.62mm MG
antiaircraft	1 x 7.62mm MG
Smoke-Laying Equipment	2 x 6 smoke dischargers
Ammunition	
76mm	42
7.62mm	2,750
Gun elevation/depression	+20°/-10°

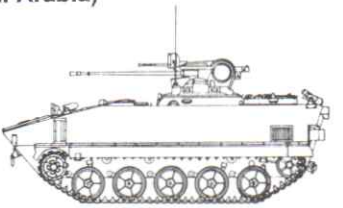
Alvis Saracen (APC)
(Qatar, Kuwait, UAE, United Kingdom)

CHARACTERISTICS (FV603)

Crew	2 + 10
Combat Weight	10,170 kg
Length Hull	5.233 m
Height (to turret top)	2.463 m
Ground Clearance	0.432 m
Max Road Speed	72 km/h
Fuel Capacity	200 liters
Max Range	400 km
Fording	1.07 km
with preparation	1.98 km
Gradient	42 %
Vertical Obstacle	0.46 m
Trench	1.52 m
Armament	
turret	1 x 7.62mm MG
ring-mounted	1 x 7.62mm MG
Smoke-laying Equipment	2 x 3 smoke dischargers
Ammunition	3,000

Note: Iraq may have some captured Saracens.

AMX-10 (APC)
(France, Qatar, Saudi Arabia)



CHARACTERISTICS:

Crew	3 + 8
Combat Weight	14,500 kg
Length	5.778 m
Width	2.78 m
Height	
overall	2.57 m
to hull top	1.92 m
Ground Clearance	0.45 m
Max Road Speed	
4th gear	65 km/h
Max Water Speed	
water jets	7 km/h
Fuel Capacity	528 liters
Max Road Range	600 km
Fording	amphibious
Gradient	60%
Vertical Obstacle	
forwards	0.7 m
Trench	2.1 m
Armament	
main	1 x 20mm cannon
coaxial	1 x 7.62mm MG
Smoke-Laying Equipment	2 x 2 smoke dischargers
Ammunition	
main	760
coaxial	2,000
Gun elevation/depression	+50°/-8°
Turret traverse	360°

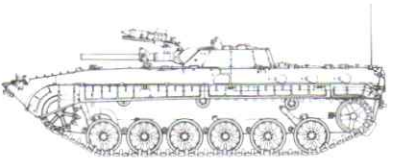
Note: Iraq has AMX-10 APC's. Saudi Arabia has several versions of the AMX-10. It does not have the AMX-10RC.

AMX-10RC (ARV) (France)

CHARACTERISTICS:

Crew	4
Combat Weight	14,800 kg
Length Chassis	6.35 m
Overall Width	2.95 m
Total Height	2.48 m
Ammunition	
90mm	30
7.62mm	3,200

BMP-1 (IFV) (Syria, Egypt)

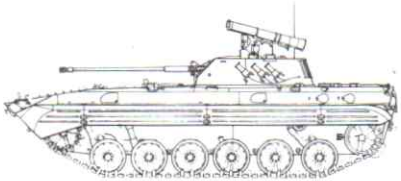


CHARACTERISTICS:

Crew	3 + 6 to 8 passengers
Length	7.6 m
Width	2.8 m
Height	2.3 m
Speed	(max 80 kph (6-8 kph water)
Range	500 km
CBT Weight	10.3 mt
Armament	AT-3, AT-4 or AT-5

Note: Iraq has BMP-1 APC.

BMP-2 (IFV)
(Kuwait)

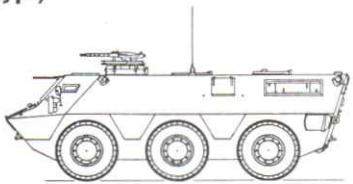


CHARACTERISTICS:

Crew	3 + 7
Combat Weight	14,600 kg
Ground Pressure	0.64 kg/cm^2
Length	6.858 m
Width	3.089 m
Height	2.077 m
Max Speed	
road	80 km/h
water	7 km/h
Max Range	500 km
Gradient	60%
Vertical Obstacle	0.7 m
Trench	2.5 m
Armament	
main	1 x 30mm cannon
coaxial	1 x 7.62mm MG
other	1 x launcher for Spandrel or Spigot ATGM
Smoke-Laying Equipment	2 x 3 smoke dischargers and diesel fuel injected into exhaust

Note: Iraq has BMP-2 APC.

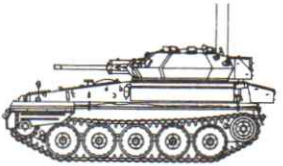
BMR-600 (IFV)
(Saudi Arabia, Egypt)



CHARACTERISTICS

Crew	2 + 11
Combat Weight	13,750 kg
Length	6.15 m
Height	
including armament	2.36 m
Ground Clearance (adjustable)	0.4 m
Max Speed	
4th gear	100 km/h
reverse	12 km/h
water	10 km/h
Fuel Capacity	300 liters
Max Range	700 km
Fording	amphibious
Gradient	68 %
Vertical Obstacle	0.8 m
Trench	1.2 m
Armament (main)	1 x 12.7mm MG
Ammunition	2,500 rounds
Gun Control Equipment	
gun elevation/depression	+60°/-15°

FV101 Scorpion (ARV) (UK)

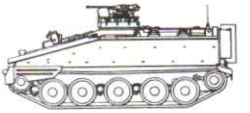


CHARACTERISTICS:

Crew	3
Weight	
loaded	7,960 kg
Length	4.39 m
Width	2.18 m
Height	2.1 m
Road Speed	87 km/h
Road Range	644 km
Vertical Obstacle	50.8 cm
Trench	2.06 m
Gradient	70%
Ground Clearance	35 cm
Wading	1.07 m
Armament	one 76mm gun; one 7.62 MG
Ammunition Capacity	40 rounds (HE HESH) 3,000 rounds 7.62
Range	up to 5,000 m HESH

Note: Iraq has some captured Iranian Scorpions.

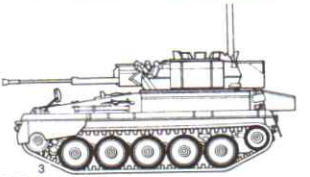
FV103 Spartan (ARV) (UK)



CHARACTERISTICS:

Crew	3
Weight	8,172 kg
Length	4.93 m
Height	2.26 m
Width	2.26 m
Ground Clearance	0.35 m
Max Road Speed	80 km/h
Road Range	483 km
Fuel Capacity	386 liters
Ammunition Carried	3,000 rounds of 7.62mm
Armament	1 x 7.62 MG

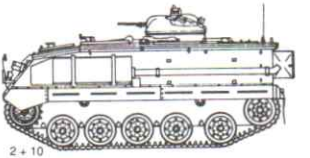
FV107 Scimitar (ARV) (UK)



CHARACTERISTICS:

Crew	3
Armament	1 x 30mm Raden L21 Gun: 1 x 7.62mm MG: 2 x 4 barrel smoke dischargers
Fuel Capacity	423 liters
Max Road Speed	80 km/h
Weight	
loaded	7,750 kg
Length	4.9 m
Height	2.096 m
Width	2.2 m
Ground Clearance	0.35 m
Road Range	644 m
Ammunition Capacity	30mm - 160 rounds; 7.62mm - 3,000 rounds
Main Armament Elevation	-10° to +35°

FV 432 (APC) (UK)



CHARACTERISTICS:

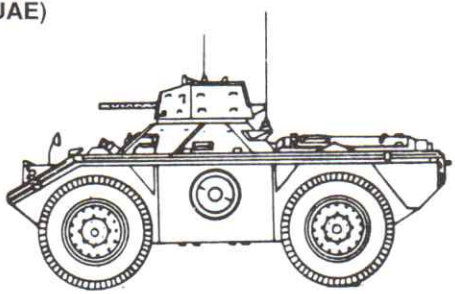
Crew	2 + 10
Armament	1 x 7.62mm GPMG and 2 x 3 barreled smoke dischargers
Length	5.251 m (overall) 4.87 m (hull)
Width	2.80 m (overall)
Height	2.286 m (including machine gun) 1.879 m (hull roof)
G/Clearance	0.406 m
Weight	15,280 kg (loaded)
Speed	52 km/h (road) 6.6 km/h (water)
Range	580 km (road)
Fuel	454 liters
Fording	amphibious
V/Obstacle	0.609 m
Trench	2.05 m
Gradient	60%

FV 510 Warrior (IFV) (UK)

CHARACTERISTICS:

Crew	2 (carries 8 infantrymen)
Weight loaded	20,000 kg
Length	5.42 m
Height	to turret top 2.28 m
Width	2.8 m
Ground Clearance	0.5 m
Max Road Speed	75 km/h
Road Range	500 km

FV711 Ferret Mk 4 (ARV) (United Kingdom, Kuwait, Oman, Bahrain, Qatar, UAE)

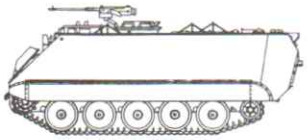


CHARACTERISTICS:

Crew	2
Combat Weight	5,400 kg
Length	3.96 m
Width	2.134 m
Height Overall	2.03 m
Ground Clearance	0.432 m
Max Speed (road)	80 km/h
Fuel Capacity	96 liters
Max Range	
road	306 km
cross country	160 km
Fording	0.914 m
with preparation	amphibious
Gradient	46%
Vertical Obstacle	0.406 m
Turning Radius	5.795 m
Armament (MG)	1 x 7.62mm

Note: Iraq may have some captured Kuwaiti Ferrets.

M113A2 (APC)
(Egypt, Kuwait, Morocco, Pakistan, Saudi Arabia)



CHARACTERISTICS:

Crew	2 + 11
Combat Weight	11,341 kg
Length	4.863 m
Width	2.686 m
over tracks	2.54 m
Height	
overall	2.52 m
to hull top	1.85 m
Ground Clearance	0.43 m
Max Speed	
road	64.37 km/h
water	5.8 km/h
Fuel Capacity	360 liters
Max Cruising Range	483 km
Fording	amphibious
Vertical Obstacle	0.61 m
Gradient	60%
Trench	1.68 m

M3 (APC)
(Saudi Arabia, Bahrain, Qatar, UAE)

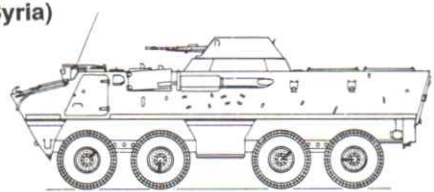
CHARACTERISTICS:

Crew/Passengers	2/10
Weight, Combat Loaded	5.8 short tons
Maximum Speed	90 km/h on land
4 km/h in water	
Cruising Range	600 km (1,000 with auxiliary tanks)
Armament	forward AAT-52 7.62mm MG on rotating mount
	possible rear 7.62mm MG on semicircular ring mount

Iraq has M3s.

Note: Saudi Arabia has the M3/VAT repair vehicle variation and UAE has the M3/VDA (antiaircraft vehicle) armed with a 20mm cannon and 7.62 mm MG.

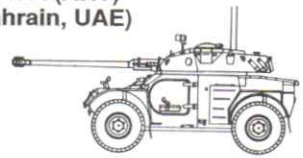
OT-64 (APC)
(Morocco, Syria)



OT-64C(1) APC

CHARACTERISTICS:	OT-64C(1) SKOT-2A
Crew	2 + 15
Combat Weight	14,500 kg
Length	7.44 m
Height	
to turret top	2.71 m
Firing Height	2.5 m
Ground Clearance	0.46 m
Max Speed	
road	94.4 km/h
water	9 km/h
Fuel Capacity	320 liters
Max Road Range	710 km
Fuel Consumption (road)	0.45 liters/km
Fording	amphibious
Gradient	60 %
Vertical Obstacle	0.5 m
Trench	2 m
Armament	
main	1 x 14.5mm MG
coaxial	1x 7.62mm MG
Ammunition	
main	500
coaxial	2,000
Gun Control Equipment	
gun elevation/depression	+29°/-4°

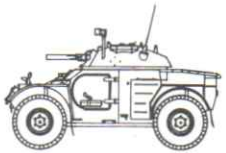
Panhard AML with H 90 turret (ARV) (France, Saudi Arabia, Bahrain, UAE)



CHARACTERISTICS:

Crew	3
Combat Weight	5,500 kg
Length Hull	3.79 m
Width	1.97 m
Height	
overall	2.07 m
to hull top	1.385 m
Ground Clearance	0.33 m
Max Road Speed	
6th gear, high range	90 km/h
Vertical Obstacle	0.3 m
Turning Radius	6 m
Armament	
main	1 x 90mm
coaxial	1 x 7.62mm MG
Smoke-Laying Equipment	2 x 2 smoke dischargers
Ammunition	
main	20
coaxial	2,000
smoke grenades	12
Gun elevation/depression	+15º/-8º

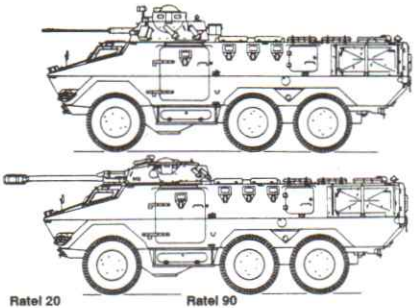
Panhard AML with HE 60-7 turret (ARV) (France, Saudi Arabia)



Characteristics same as above except 60mm mortar replaces 90mm gun and 12.7mm MG replaces 7.62mm MG. Ammo load not available.

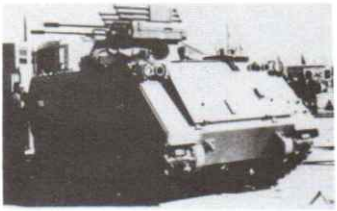
Note: Iraq has AML H 90 and HE 60-7s.

Ratel 20 (IFV) and Ratel FSV 90 (Morocco)



CHARACTERISTICS	Ratel 20	Ratel 90
Crew	11	10
Combat Weight	18,500 kg	19,000 kg
Length (hull)	7.212 m	7.212 m
Height (overall)	2.915 m	2.915 m
Ground Clearance	0.34 m	0.34 m
Max Road Speed	105 km/h	105 km/h
Fuel Capacity	430 liters	430 liters
Max Range		
road	1,000 km	1,000 km
cross-country	14 h	14 h
Fuel Consumption		
road	0.4 liters/km	0.4 liters/km
cross-country	1 liter/km	1 liter/km
Fording	1.2 m	1.2 m
Gradient	60%	60%
Vertical Obstacle	0.35 m	0.35 m
Trench	1.15 m	1.15 m
Armament		
main	1 x 20mm cannon	1 x 90mm gun
coaxial	1 x 7.62mm MG	1 x 7.62mm MG
antiaircraft, turret	1 x 7.62mm MG	1 x 7.62mm MG
antiaircraft, rear	1 x 7.62mm MG	1 x 7.62mm MG
Ammunition		
90mm	none	69
20mm	1,200	none
7.62mm	6,000	6,000
12.7mm	none	none
Gun Control Equipment		
gun elevation/depression (main)	+38°/-8°	+15°/-8°

Sinai-23 SPAAGG (Egypt)



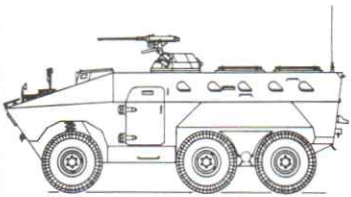
CHARACTERISTICS:

Armament	2 X 23 mm cannon 6 x SA-7 SAMs

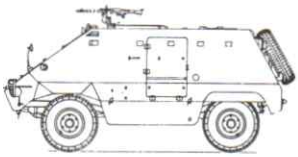
Urutu EE-11 (APC) (UAE, Morocco)

CHARACTERISTICS:

Crew	13 (12 + 1)
Combat Weight	14,000 kg
Length	6.1 m
Height	
to top of MG mount	2.72 m
Ground Clearance	0.38 m
Max Road Speed	105 km/h
Max Water Speed	8 km/h
Fuel Capacity	380 liters
Max Range	
road	850 km
water	60 km
Fording	amphibious
Gradient	60 %
Vertical Obstacle	0.6 m
Smoke-laying Equipment	2 or 3 smoke dischargers on either side of turret (optional)



UR-416
(Saudi Arabia, Morocco, Qatar)

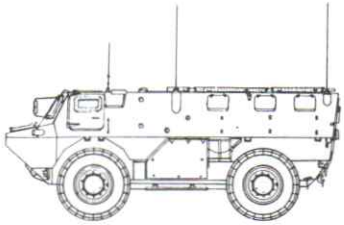


CHARACTERISTICS:

Crew	2 + 8
Combat Weight	7,600 kg
Length	5.21 m
Width	2.3 m
Height	
with turret	2.52 m
Ground Clearance	0.44 m
Max Road Speed	85 km/h
Fuel Capacity	150 liters
Max Road Range	600-700 km
Fuel Consumption (road)	0.25 liters/km
Fording	1.4 m
Gradient	70 %
Vertical Obstacle	0.55 m
Armament	
basic model	1 x 7.62mm MG
Smoke-laying Equipment	optional

Note: Some of the Moroccan UR-416s are fitted with Cobra ATGMs.

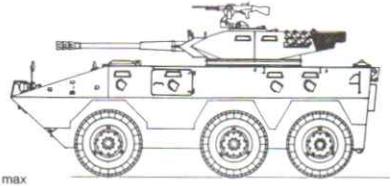
VAB (APC)
(France, Qatar, UAE, Morocco)



CHARACTERISTICS:

Crew	2 + 10
Combat Weight	13,000 kg
Length	5.98 m
Width	2.49 m
Height (to hull top)	2.06 m
Ground Clearance	
axles	0.4 m
hull	0.5 m
Max Road Speed	
5th gear	92 km/h
Max Water Speed	7 km/h
Fuel Capacity	300 liters
Max Road Range	1,000 km
Fording	amphibious
Gradient (starting from static)	50%
Vertical Obstacle	0.5 m
Turning Radius	9 m

V-300 Commando



CHARACTERISTICS:

Crew	3 + 9 max
Combat Weight	14,318 kg
Length	6.4 m
Ground Clearance	
hull	0.533 m
axle	0.381 m
Max Speed	
road	92 km/h
water	5 km/h
Fuel Capacity	265 liters
Max Range	700 km
Fording	amphibious
Gradient	60%
Vertical Obstacle	0.609 m

Note: Iraq has some captured Kuwaiti V-300s. Captured equipment may or may not have the 90mm gun.

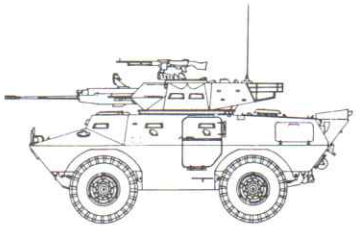
Walid (APC) (Egypt)

CHARACTERISTICS:

Crew	2 + 8-10
Max Payload	2,800 kg
Length	6.12 m
Height	2.3 m
Max Road Speed	66 km/h
Max Range	800 km

Note: Egypt has at least two versions, a minelayer and a MLRS firing smoke rockets.

V150 (APC)
(Saudi Arabia)



CHARACTERISTICS:

Crew	12
Weight, Combat Loaded	9,550 kg
Maximum Road Speed	88 km/h
Range, Maximum	500 km
Armament	.50 caliber machine guns

Note: Iraq may have some captured Kuwaiti V-150s. Saudi Arabia has 84/94mm AT weapons mounted on the V-150. Syria and Iraq have BTR-60s. Syria and Egypt have BTR-50s.

Notes

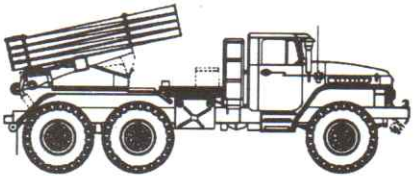
Equipment Recognition
Artillery

ASTROS II (Saudi Arabia)

CHARACTERISTICS:

The ASTROS II system consists of the launching vehicle, ammunition supply vehicles with hydraulic crane, and optional fire control units, all of which are based on the same 6 x 6 cross-country truck designed and built by the AVIBRAS subsidiary company TECTRAN. The launcher can fire three different types of rocket, the AVIBRAS SS-30 (32 rounds per launcher), the SS-40 (16 rounds per launcher), and the SS-60 (4 rounds per launcher). Ranges of the individual rockets in this system range from 9 to 60 km, with all rockets having wrap-around fins for improved accuracy.

BM-21 MLRS (Syria, Egypt)



CHARACTERISTICS:

Type	SP
Chassis	URAL-375
Number of Barrels	40
Rocket Caliber	122mm
Max Range	20,500 m
Launcher Crew	6
Weight	
Loaded	11,500 kg
Length	7.35 m
Height	2.85 m
Road Speed	75 km/h
Range	405 km
Launcher Elevation	0 to 55°
Time to Reload (Min)	10

Note: Iraq has BM-21 and ASTROS II.

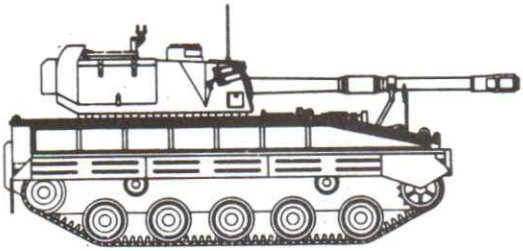
D-30 (122mm T)
(Egypt, Syria)

CHARACTERISTICS:

Caliber	121-92mm
Muzzle Brake	multi-baffle
Breech mechanism	semi-automatic vertical sliding wedge breech-block
Shield	yes
Weight	
travelling order	3210 kg
Length (travelling)	5.4 m
Ground clearance	0.325-0.345 m
Elevation/Depression	+70°/-7°
Rate of fire	7-8 rpm
Range	
max	15,400 m
with RAP	21,900 m
Crew	7

Note: Iraq has the D-30.

Fv 433 Abbott (105mm SP) (United Kingdom)



CHARACTERISTICS:

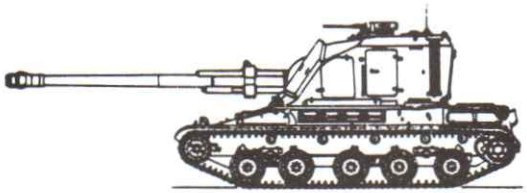
Crew	4
Weight (loaded)	16,500 kg
Length	5.84 m
Width	2.64 m
Ground Clearance	0.40 m
Max Road Speed	48 km/h
Max Road Range	400 km
Fuel Capacity	386 liters
Ammunition	
Main	40 rounds of 105mm
Antiaircraft	1,200 rounds of 7.62mm
Gun Muzzle Velocity	424 m/s
Shell Weight (HE)	19.05 kg
Range	17 km

GCT (155mm SP Gun)
(Saudi Arabia)

Note: The GCT is also known as the AUF1.

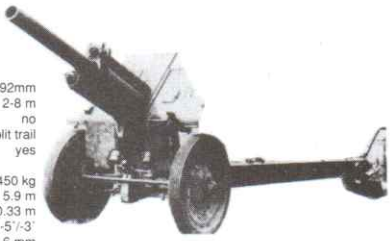
CHARACTERISTICS:

Crew	4
Combat Weight	42,000 kg
Length, Hull	6.7 m
Width	3.15 m
Over Tracks	3.115 m
Height (to turret top)	3.25 m
Firing Height	2.16 m
Ground Clearance	0.42 m
Max Road Speed (5th Gear)	60 km/h
Max Road Range	450 km at 40 km/h
Fording	2.1 m
Gradient	60%
Vertical Obstacle	
Forward	0.93 m
Reverse	0.48 m
Trench	1.9 m
Armament	
Main	1 x 155mm gun
Antiaircraft	1 x 7.62mm or 12.7mm gun
Smoke-laying Equipment	2 x 2 smoke dischargers
Ammunition	
Main	42
Antiaircraft	2.050 rounds of 7.62mm or 800 rounds of 12.7mm
Maximum Range	24 km (conventional ammunition) 32 km (extended)



Note: Iraq has GCT.

M-30 (122mm T) (Egypt, Syria)



CHARACTERISTICS:

Caliber	121-92mm
Barrel Length (overall)	2-8 m
Muzzle Brake	no
Carriage	split trail
Shield	yes
Weight	
traveling order	2450 kg
Length (traveling)	5.9 m
Ground clearance	0.33 m
Elevation/Depression	+63-5°/-3°
Rate of fire	5-6 rpm
Range	
max	11,800 m
effective HEAT	630 m
Crew	8

Note: Iraq has the M-30.

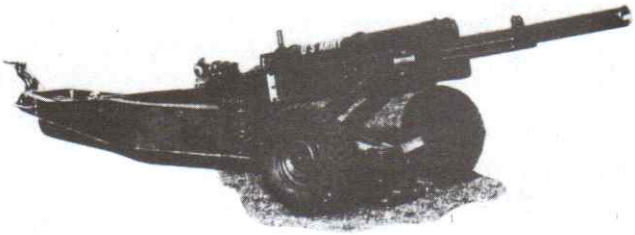
M-46 (130mm T) Gun (Egypt, Oman, Syria)

CHARACTERISTICS;

Caliber	130mm
Barrel Length (overall)	7-6 m
Muzzle Brake	pepperpot
Breech Mechanism	horizontal sliding wedge breech-block
Carriage	split trail with limber
Shield	optional
Weight	
traveling order	8,450 kg
Length (traveling)	11.73 m
Ground clearance	0.4 m
Elevation/Depression	+45°/-2.5°
Rate of fire	5-6 rpm
Range	27,150 m
Crew	9

Note: Iraq has the M-46.

M102 (105mm Towed)
(Oman, Saudi Arabia, UAE)



CHARACTERISTICS:

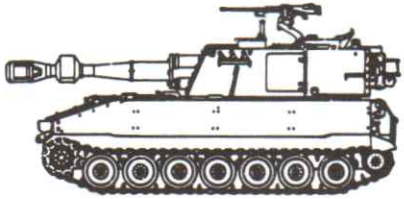
Crew	8
Caliber	105mm
Muzzle Break	none
Recoil Breech	hydro-pneumatic vertical sliding
Carriage	box trail
Shield	no
Weight (traveling)	5.182 kg
Length (traveling)	1.964 m
Height (traveling)	1.594 m
Ground Clearance (traveling)	0.33 m
Elevation/Depression	+75°/-5°
Traverse	360°
Rate of Fire	10 rds/min
Max Range	
With HE (M1)	11,500 m
With HERA (M548)	15,100 m

Note: Kuwaiti forces have the M114 (155mm T) howitzer. Iraq may have captured M114s.

M109A1 (155mm SP)
(Saudi Arabia, United Kingdom, Egypt)

CHARACTERISTICS:

Crew	6
Combat Weight	24,948 kg
Length, Hull	6.19 m
Width	3.15 m
Height	
Including Antiaircraft MG	3.28 m
Reduced	2.8 m
Ground Clearance	0.46 m
Max Road Speed	56.3 km/h
Fuel Capacity	511 liters
Max Road Range	349 km
Fording	1.07 m
Gradient	60%
Vertical Obstacle	0.53 m
Trench	1.83 m
Armament	
Main	1 x 155mm Howitzer
Antiaircraft	7.62mm MG
Smoke-laying Equipment	None
Ammunition	
Main	34 plus 2 CLGP
12.7mm Antiaircraft	500
Gun Elevation/Depression	+75°/-3°
Maximum Range	18.1 km (conventional ammunition) 24 km (extended)



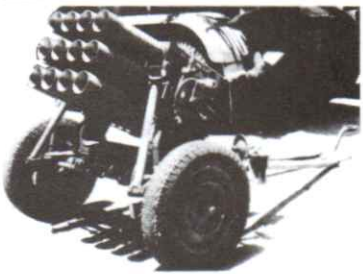
Note: Iraq has M109A1/A2s that were captured from Iran and Kuwait.

M198 (155mm T) (Saudi Arabia)

CHARACTERISTICS:

Caliber	155mm
Barrel length	6.096 m
Muzzle brake	double-baffle
Recoil	hydro-pneumatic
Breech mechanism	screw
Carriage	split trail
Shield	no
Weight	
firing position	7,163 kg
Length	
traveling	12.34 m
Ground clearance	
(traveling)	0.33 m
Elevation/Depression	+72°/-5°
Rate of fire	4 rpm
Max range	
M107 projectile	18,150 m (Z8 charge)
M483A1 projectile	22,000 m (Z8C charge)
M549A1 RAP	30,000 m (Z8S charge)
Nominal towing speed	
cross-country	8 km/h
improved roads	72 km/h
secondary roads	40 to 48 km/h
Crew	11
Towing vehicle	M813 M939 5-ton (6 x 6) truck

Type 63 (107 mm) MLRS (Syria)



CHARACTERISTICS:

Caliber	107 mm
Number of barrels	12
Number of rockets	12
Rate of fire	12 rds in 7-9 secs
Reload time	3 min
Carriage	split trail
Weight in firing Position	611 kg
Length traveling	2.6 m
Elevation	0-60°
Traverse	+15°
Crew	5

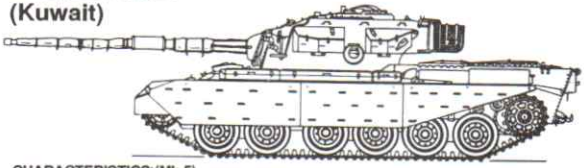
Equipment Recognition
Tanks

AMX-30S MBT (105mm)
(France, Qatar, Saudi Arabia)

CHARACTERISTICS:

Crew	4
Combat Weight	36,000 kg
Length Hull	6.59 m
Width	3.1 m
Height	
to hull top	1.5 m
to turret top	2.29 m
overall, including searchlight	2.86 m
Firing Height	1.81 m
Ground Clearance	0.44 m
Max Speed	
5th gear	65 km/h
Average Speed	
road	50 km/h
cross-country	35-40 km/h
Fuel Capacity	970 liters
Max Road Range	500-600 km
Fording	1.3 m
with preparation	2.2 m
with snorkel	4 m
Gradient	60%
Vertical Obstacle	0.93 m
Trench	2.9 m
Armament	
main	1 x 105mm gun
coaxial	1 x 20mm cannon (or 1 x 12.7mm MG)
antiaircraft	1 x 7.62mm MG
Smoke-laying Equipment	2 smoke dischargers either side of turret
Ammunition	
main	47
coaxial	1,050
antiaircraft	2,050
Night Vision	NBC capability

Centurion MBT (Kuwait)



CHARACTERISTICS: (Mk 5)

Crew	4
Combat Weight	50,728 kg
Length Gun Forward	9.829 m
Length Hull	7.556 m
Height (without AA MG)	2.94 m
Ground Clearance	0.457 m
Max Road Speed	34.6 km/h
Fuel Capacity	458 liters
Max Road Range	102 km
Fording	1.45 m
with preparation	2.74 m
Gradient	60%
Vertical Obstacle	0.914 m
Trench	3.352 m
Armament	
main	1 x 83.4mm
coaxial	1 x 7.62mm MG
antiaircraft	1 x 7.62mm MG
ranging MG	none
Smoke-laying Equipment	2 x 6 smoke dischargers on either side of turret
Ammunition	
main	65
7.62mm	4,250
12.7mm	none
Gun Control Equipment	
gun elevation/depression	+20°/-10°
gun stabilizer	
vertical	yes
horizontal	yes

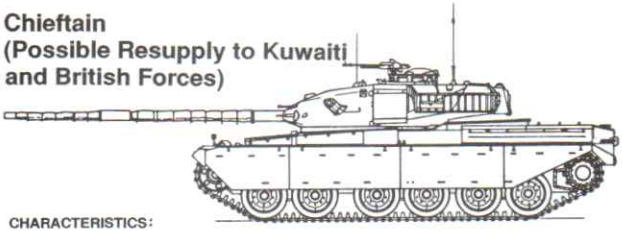
Note: Iraq may have some captured Kuwaiti Centurions.

Challenger MBT (120mm) (UK)

CHARACTERISTICS:

Crew	4
Armament	1 x 120mm, 1 x 7.62mm MG (coaxial), 1 x 7.62mm MG (antiaircraft), 2 x 5 smoke dischargers
Ammunition	64 x 120mm, 4,000 x 7.62mm
Length Hull	8.327 m
Height to Top of Commander's Sight	2.95 m
Height to Turret Top	2.5 m
Ground Clearance	0.5 m
Max Road Speed	56 km/hr
Max Range	Classified
Fuel Capacity	1,592 liters
Fording	1.07 m
Vertical Obstacle	0.9 m
Width Overall	3.518 m
Weight, Combat	62,000 kg
Weight, Empty	60,000 kg
Trench	2.8 m
Gradient	58%
Armor	Classified
Armor Type	Chobham/steel
NBC System	Yes
Night Vision Equipment	Yes (passive for commander, gunner and driver)

Chieftain
(Possible Resupply to Kuwaiti and British Forces)



CHARACTERISTICS:

Crew	4
Combat Weight	55,000 kg
Length Gun	
forward	10.795 m
rear	9.87 m
Length Hull	7.518 m
Height Overall	2.895 m
Ground Clearance	0.508 m
Max Road Speed	48 km/h
Fuel Capacity	950 liters
Max Range	
road	400-500 km
cross-country	200-300 km
Fording	1.066 m
Gradient	60%
Vertical Obstacle	0.914 m
Trench	3.149 m
Armament	
main	1 x 120mm
coaxial	1 x 7.62mm MG
antiaircraft	1 x 7.62mm MG
RMG	1 x 12.7mm MG
Smoke-laying Equipment	2 x 6 smoke dischargers mounted on each side of turret
Ammunition	
main	64
7.62mm	6,000
12.7mm	300
Gun Control Equipment	
gun elevation/depression	+20°/-10°
gun stabilizer	
vertical	yes
horizontal	yes

Note: Iraq has some Chieftains.

M60A1/A3 MBT (105mm)
(Egypt, Saudi Arabia)

CHARACTERISTICS:

Crew	4
Combat Weight	52,617 kg
Length Hull	6.946 m
Width	3.631 m
Height	3.27 m
Firing Height	2.095 m
Ground Clearance	0.45 m
Max Road Speed	48.28 km/h
Fuel Capacity	1,420 litres
Max Road Range	480 km
Fording	1.22 m
with preparation	2.4 m
Gradient	60%
Vertical Obstacle	0.914 m
Trench	2.59 m
Armament	
main	1 x 105mm gun
coaxial	1 x 7.62mm MG
antiaircraft	1 x 12.7mm MG
Ammunition	
main	63
7.62mm	5,950
12.7mm	900
Gun Elevation/Depression	+20° /-10°

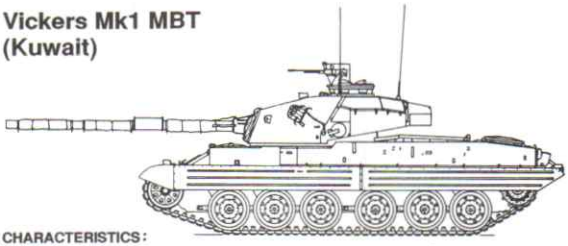
Note: Iraq has some captured Iranian M60s.

M84 MBT (125mm) (Kuwait)

CHARACTERISTICS:

Crew	3
Width Overall	3.57 m
Height (turret roof)	2.19 m
Firing Height	1.651 m
Ground Clearance	0.428 m
Max Road Speed	60 km/h
Range	450 to 700 km
Fording Without Preparation	1.2 m
Fording With 5 Minutes Preparation	1.8 m
Fording With Special Equipment (takes 20 minutes to install)	5 m (max water speed 1.5 m/s)
Gradient	60%
Vertical Obstacle	0.85 m
Trench	2.8 m
Armament	
main	1 x 125mm gun
coaxial	1 x 7.62mm MG
antiaircraft	1 x 12.7mm MG
Ammunition	42 (total)
	22 (ready use)
Rate of Fire	6 to 9 rpm (automatic)
	2 rpm (manual)
Gun elevation/depression	-13° 47 min/-6° 13 min
Standard Equipment	intercom, radio (20 km range), NBC system, automatic fire extinguishing system, front-mounted dozer blade, camouflage, mounting points for mine clearing kit

Vickers Mk1 MBT (Kuwait)



CHARACTERISTICS:

Crew	4
Combat Weight	38,600 kg
Length Gun Forward	9.728 m
Length Hull	7.92 m
Height (to turret roof)	2.438 m
Ground Clearance	0.406 m
Max Speed	
road, forward	48 km/h
Fuel Capacity	1,000 liters
Max Road Range	480 km
Fording	1.143 m
Gradient	60%
Vertical Obstacle	0.914 m
Trench	2.438 m
Armament	
main	1 x 105mm
coaxial	1 x 7.62mm MG
antiaircraft	1 x 7.62mm MG
ranging machinegun	1 x 12.7mm
Smoke-laying Equipment	6 smoke dischargers mounted on either side of turret
Ammunition	
main	44
7.62mm	3,000
12.7mm	600
Gun Control Equipment	
gun elevation/depression	+20°/-7°
gun stabilizer	
vertical	yes
horizontal	yes

Note: Iraq may have some captured Kuwaiti Vickers .

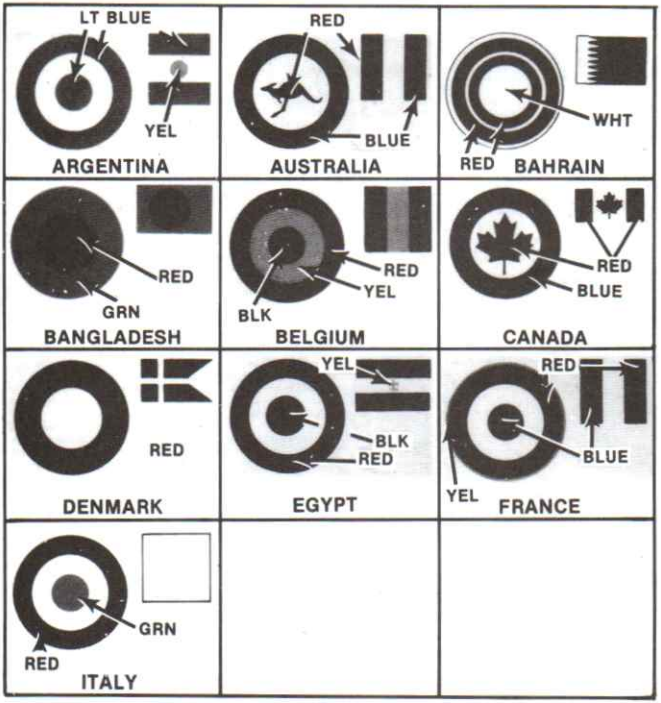
Note: Syria, Egypt, and Iraq have T-62 tanks. Egypt has modified some T-62s to carry twin launchers for Sakr ground-to-ground rockets. Syria has T-72 tanks. Both Syria and Egypt have T-55s.

Aircraft Markings

The following countries have made a military commitment to support the United Nations' sanctions against Iraq. Air assets for these countries either have been committed or could be committed in the future.

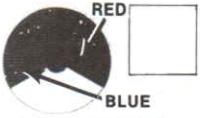
Argentina
Australia
Bahrain
Bangladesh
Belgium
Canada
Denmark
Egypt
France
Italy
Kuwait
Morocco
Netherlands
Norway
Oman
Pakistan
Portugal
Qatar
Saudi Arabia
Senegal
Soviet Union
Syria
United Arab Emirates
United Kingdom
United States

Aircraft markings for these countries are provided for your information.

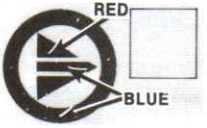

LT BLUE
YEL
ARGENTINA
RED
BLUE
AUSTRALIA
WHT
RED
BAHRAIN
RED
GRN
BANGLADESH
RED
YEL
BLK
BELGIUM
RED
BLUE
CANADA
RED
DENMARK
YEL
BLK
RED
EGYPT
RED
BLUE
YEL
FRANCE
GRN
RED
ITALY

KUWAIT

MOROCCO



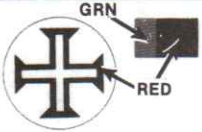
NETHERLANDS



NORWAY

OMAN

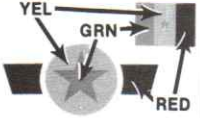
PAKISTAN



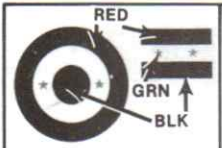
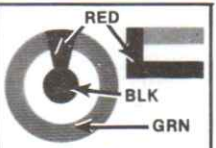
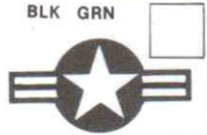
PORTUGAL

QATAR

SAUDI ARABIA



SENEGAL

 SYRIA	 SOVIET UNION	 UAE
 UNITED KINGDOM	 UNITED STATES	

Summary of Friendly Foreign Military Involvement

US Forces in Saudi Arabia and the Persian Gulf region can expect to encounter foreign forces from all over the world. The following attempts to summarize the forces that have deployed or were scheduled to deploy to the area as of October, according to open sources. Because of the rapidly changing political and military environment in the region, some portions of this summary may be outdated by the time it is received.

Great Britain: The British have 3,000 troops, with 2,000 logistics personnel in Cyprus. The 7th Armored Brigade was scheduled to arrive late October with 120 Challenger tanks and 6,000 troops. British troop strength is expected to reach 15,000. Three squadrons of Tornado and Jaguar interceptors and ground-attack jets are in Saudi Arabia, Bahrain, and Oman.

France: A 4,000-man force has begun leaving for the Gulf. The force contains a helicopter regiment with 48 gunships, an infantry regiment with antitank missiles, an armored regiment, and an antiaircraft missile unit. The force will bring the total French presence to about 13,000 troops. About 14 warships, with more than 8,000 troops, are in the Gulf or en route. Six Gazelle and Puma helicopters, with 100 troops, are deployed in Saudi Arabia. A company of 190 paratroopers, equipped for chemical warfare, is in the United Arab Emirates. France has also pledged three squadrons of interceptors and fighter-bombers.

Gulf Cooperation Council (GCC): (Saudi Arabia, Bahrain, Kuwait, Oman, United Arab Emirates, and Qatar) A rapid deployment force of up to 10,000 is based in northeast Saudi Arabia. This force has been beefed up with some 7,000 soldiers of Kuwait's 20,000-man military who escaped when Iraq invaded. The GCC and other local Arab forces in the Gulf total around 144,500 troops, 330 combat aircraft, 800 tanks, and 36 naval units.

Egypt: Fourteen thousand troops including paratroopers, commandos, chemical warfare specialists, and infantry are in Saudi Arabia. Several thousand more soldiers from the 3d Armored Division and the 3d Mechanized Infantry Division were expected to arrive in Saudi Arabia in late October. About 500 troops are in the United Arab Emirates. Egypt has pledged up to 20,000 troops.

Pakistan: This country has pledged 5,000 troops. So far, about 2,000 have been sent to the United Arab Emirates in addition to the 1,000 advisors already in-country, and 2,000 to Saudi Arabia. About 5,000 advisors are already attached to the Saudi Armed Forces.

Morocco: Twelve hundred troops are in Saudi Arabia and 500 are in the United Arab Emirates.

Syria: Four thousand troops, mostly special forces, were sent to Saudi Arabia. A 15,000-man armored division, with about 270 tanks and heavy artillery is preparing to go to Saudi Arabia. Some troops are based in the United Arab Emirates.

Bangladesh: This country has pledged 3,000 troops. So far, 2,000 are in Saudi Arabia.

The following countries from outside the Persian Gulf region have sent or have offered to send naval forces to the area: Argentina, Australia, Belgium, Canada, Denmark, France, Italy, the Netherlands, Norway, Portugal, Spain, the USSR, and the United Kingdom.

Most of this information was extracted from *The Washington Post*, 26 September 1990, and an Associated Press article on 15 October 1990, entitled *Opposing Forces in the Persian Gulf*.

Note: As of 19 October 1990, Poland, Romania, Bulgaria, Czechoslovakia, Lebanon, Honduras, Japan, Niger, Tunisia, Turkey, Algeria, Brazil and Germany have also offered to provide some kind of assistance, either financial or military as part of the United Nations sanctions. Should conflict occur, Yeman, Jordan, Iran, Turkey, and Israel could become involved.

Country Equipment Index

EQUIPMENT: ARGENTINA
AIRCRAFT: C-130H

EQUIPMENT: BAHRAIN
APC, IFV, ACV, ARV: M3; AML H90
ANTITANK: TOW; M113 w/TOW
AIR DEFENSE: RBS- 70
AIRCRAFT: F-16C; F-5B/E

EQUIPMENT: BANGLADESH
ANTITANK: 106mmRR

EQUIPMENT: BELGIUM
AIRCRAFT: F-16C

EQUIPMENT: CANADA.
AIRCRAFT: CF-18

EQUIPMENT: EGYPT
TANKS: M60; T-62
APC, IFV, ACV, ARV: M-113; BTR-60; BMP-1; BMR- 600; Walid
ARTILLERY: M109 (155mm SP); M-46 (130mm T); D- 30 (122mm T); M-30 (122mm T); MLRS (BM-21)
ANTITANK:TOW; Swingfire; AT-3 (Sagger)
AIR DEFENSE: Crotale; SA-9; SA- 7; Sinai-23 SPAAG
AIRCRAFT: Sea King, F-16

EQUIPMENT: FRANCE
APC, IFV, ACV, ARV: AMX-10RC; AML H90; AML HE 60- 7; VAB
ARTILLERY: M101 (105mm T)
ANTITANK: HOT; APILAS; 89mm LRAC 89
AIR DEFENSE: MISTRAL; 53T1/53T2;76T1/76T2 AA Gun
AIRCRAFT: Mirage 2000; Puma; Gazelle; AS 365N Dauphin, SEPECAT Jaguar

EQUIPMENT: ITALY
AIRCRAFT: Tornado IDS

EQUIPMENT: KUWAIT
TANKS: Chieftain; M-84; Centurion; Vickers Mk 1
APC, IFV, ACV, ARV: M-113; BMP- 2; Saracen
ARTILLERY: M114 (155mm T)
AIRCRAFT: Mirage F-1; Puma; Gazelle; A-4; Hawk; C-130; VC-10K, Strikemaster

EQUIPMENT: MOROCCO
APC, IFV, ACV, ARV: Ratel 90mm; Ratel 20mm; UR- 416; OT-64; Urutu EE-11
ANTITANK: MILAN

EQUIPMENT: NETHERLANDS
AIRCRAFT: F16C

EQUIPMENT: OMAN
ARTILLERY: M-46 (130mm T); M102 (105mm T)
ANTITANK: MILAN; TOW
AIR DEFENSE: JAVELIN; Rapier (towed)
AIRCRAFT: Hawker-Hunter; Jaguar; C-130; Skyvan; Buffalo; Strikemaster

EQUIPMENT: PAKISTAN
APC, IFV, ACV, ARV: M-113

EQUIPMENT: QATAR
TANKS: AMX- 30
APC, IFV, ACV, ARV: AMX-10; VAB; M3; Saracen; UR- 416
ANTITANK: AMX-10 w/HOT; VAB w/MILAN; VAB w/HOT
AIR DEFENSE: Rapier (towed)
AIRCRAFT: Mirage F-1; Alpha Jet; Hawker-Hunter

EQUIPMENT: SAUDI ARABIA
TANKS: M60; AMX-30
APC, IFV, ACV, ARV: M- 113; AMX-10; V-150; AML H90; AML HE 60-7; M3; M3/VAT; BMR-600; UR- 416
ARTILLERY: M109 (155mm SP); M102 (105mm T); ASTROS II; GCT (155mm SP); M189 (155mm T)
ANTITANK: HOT; AMX-10 w/HOT; V-150 w/TOW; V-150 w/84 or 94mm AT weapons; VCC1 w/TOW; M- 113 w/TOW
AIR DEFENSE: Shanine I and II; V-150 w/Vulcan; towed Vulcan
AIRCRAFT: Blackhawk (Desert Hawk); Sea King; AS 365N Dauphin; Agusta-Bell Model

212ASW; Bell Model 205 (UH-1 Iroquois); Bell Model 206B (Jet Ranger II); F-15C; Tornado; Hawk; F-5B/E; RF-5E; E-3A; KE-3; KC-130; C-130; Strikemaster

EQUIPMENT: SYRIA
TANKS: T-62
APC, IFV, ACV,ARV: BTR-60; BMP- 1; OT-64
ARTILLERY: MLRS (BM-21; Type 63); M-46 (130mm T); D-30 (122mm T); M-30 (122mm T)
ANTITANK: MILAN; AT-3 (Sagger)
AIR DEFENSE: Crotale; SA-9; SA-7; ZSU-23- 4

EQUIPMENT: UNITED ARAB EMIRATES
APC, IFV, ACV, ARV M-113; M3; AML H90; VAB; Saracen; Urutu EE-11
ARTILLERY: M102 (105mm T)
ANTITANK: MILAN; TOW
AIR DEFENSE: Rapier; Oerlikon Type GDF-002
AIRCRAFT: Mirage 2000; Mirage III; Mirage V; Hawk; Aermacchi

EQUIPMENT: UNITED KINGDOM
TANKS: Challenger ; Chieftain
APC, IFV, ACV, ARV: FV 107 Scimitar; FV 711 Ferret; FV 510 Warrior; FV 432; FV 103 Spartan; Alvis Salidin; FV101 Scorpion; Saracen
ARTILLERY: FV 433 ABBOT (105mm SP); M109 (155mm SP)
ANTITANK: MILAN; FV 102 Striker; LAW 80
AIR DEFENSE: JAVELIN
AIRCRAFT: Tornado ADV; Nimrod; Jaguar; VC-10K; Lynx w/TOW; Gazelle

Notes